01-SM5-433
(ATI-0008-P)

REMARKS

Applicants' undersigned representative submits that there were 36 claims pending in the present application as a result of the amendment dated September 26, 2002, which added Claims 32-36. The present Office Action indicates that only 31 claims were pending. Applicants' undersigned representative believes this to be an oversight by the Examiner, and requests that the Examiner contact Applicants' undersigned representative immediately if a copy of Claims 32-36 is needed or for any other reason related to Claims 32-36. Applicants request consideration of Claims 32-36 and further requests that the Examiner address these claims in its next response.

Claims 1-36 were pending in the present application. Applicants' undersigned representative appreciates the indication that Claims 25-31 are presently allowable, leaving Claims 1-24, and 32-36 for further consideration upon entry of the present amendment.

Reconsideration and allowance of the claims is respectfully requested in view of the following remarks.

Claim Rejections Under 35 U.S.C. §102(b)

Claims 1-4, 14, 16-17, and 28 stand rejected under 35 U.S.C. §102(b) as allegedly unpatentable by U.S. Patent No. 4,863,578 to Collins et al. (hereinafter "Collins"). Applicants respectfully traverse.

Before addressing the rejection in detail, it is noted that dependent Claim 28 was indicated as allowable in the Office Action Summary and the section entitled Allowable Subject Matter. Applicants' undersigned representative believes the allowance of Claim 28 to be proper since Claim 28 depends on allowed independent Claim 25, and as such, includes all of the features found in Claim 25. Since Claim 25 has been allowed and is not the subject of a rejection in the present Office Action, the allowance of Claim 28 is presumed. The Examiner is requested to address this inconsistency in its next response.

To anticipate a claim under 35 U.S.C. §102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Barient, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988).

Independent Claims 1 and 14 have in common the following feature: a plasma tube or plasma tool comprising, inter alia, at least one conductive fiber secured to the body. Collins fails to disclose at least one conductive fiber secured to the body.

Collins is generally directed to a cylindrical magnetron coating apparatus in which a glass fiber is passed therethrough to provide a hermetic coating onto the glass fiber. Applicants respectfully submit that Figures 1-3 do not show a conductive fiber secured to the body as indicated in the present Office Action. Rather, the glass fiber is axially fed through the cylindrical magnetron coating apparatus without contacting the apparatus to permit coating thereof. For example, Collins discloses in the specification that "[t]he fiber is drawn by a conventional capstan and wound on a take up drum at low tension. The typical draw speed is 1-20 meters/minute. Holes are drilled into each of the end feedthroughs 7 of the vacuum apparatus 1 and fitted with conventional o-rings to accommodate the passage of the optical fiber 3 while isolating the vacuum apparatus 1 from the outside environment." (Column 4, lines 11-18). Moreover, as shown in Figures 1-3, directional arrows are provided to illustrate the direction of the fiber as it is fed through the apparatus. Thus, the glass fibers of Collins are not secured to the body but rather are configured to be continuously fed in an axial direction through the magnetron apparatus, which is coaxially oriented with respect to the glass fiber.

As all elements of independent Claims 1 and 14 have not been disclosed, these claims are patentable over the cited reference. Given that Claims 2-4, and 16-17 each further limit and ultimately depend from one of these independent claims, they too are patentable.

Claim Rejections Under 35 U.S.C. §103(a)

Claims 5-11, 13, 18-19, and 23-24 stand rejected under 35 U.S.C. §103(a), as allegedly unpatentable by U.S. Patent No. 4,863.578 to Collins et al. (hereinafter "Collins"). Applicants respectfully traverse these rejections.

Collins is generally directed to a reactive sputter deposition process for coating heavy metal fluoride glass fibers. The reactive sputter deposition apparatus generally comprises an input feedthrough, a cylindrical magnetron region where deposition occurs, and an output

feedthrough. The cylindrical magnetron region includes a cylindrical cathode, a cylindrical mesh anode, and an inner extraction grid, which permits transport of a sputtered material from the cathode and onto the fiber. The components of the apparatus are coaxially with the fiber as it is drawn into the apparatus by conventional capstan and wound onto a take-up drum at low tension. As described, it is believed that the glass fibers do not contact the apparatus, and as such, cannot possibly be construed as secured to the apparatus.

Applicants assert that a prima facie case of obviousness has not been made against Claims 5-11, 13, 18-19, and 23-24. Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Applicants' Independent Claims 1and 14 are reproduced below for convenience.

Claim 1. A plasma tube comprising:

an open ended cylindrical body, wherein the body includes a gas inlet at one end, and an outlet at an other end; and

at least one conductive fiber secured to the body and positioned to enhance an applied electric field.

Claim 14. A plasma tool comprising:

a plasma generating chamber comprising a plasma tube, wherein the plasma tube comprises an open ended cylindrical body, wherein the body includes a gas inlet at one end an outlet opening at an other end, and at least one conductive fiber secured to the body and positioned to enhance an applied electric field; and

an energy source in operative communication with the plasma tube.

A prima facie case has not been established because the cited reference does not teach or suggest at least one conductive fiber secured to the body and positioned to enhance an applied electric field.

01-SM5-423
(ATI-0008-P)

As previously discussed, Collins does not teach or suggest at least one conductive fiber secured to the body. Since Collins is generally directed to continuously coating optical fibers for waveguides by continuously passing a fiber through a cylindrical body, securing the fiber to the body would fail to provide the intended results.

Moreover, there is no disclosure or suggestion of a conductive fiber. The glass fibers in Collins are characterized as heavy metal fluorides, which are then coated by a reactive sputter deposition process using the magnetron vacuum apparatus. Since Collins is generally directed to glass fibers for use as optical waveguides, it is not believed that the heavy metal fluoride glass fibers of Collins would be conductive or, for that matter, be sufficient to enhance an applied electric field. The interaction of electrical fields with optical waves would likely give rise to distortion problems during use.

Thus, independent Claims 1 and 14 are patentably distinguished from Collins since Collins fails to teach or suggest at least one conductive fiber secured to the body. Likewise, dependent Claims 5-11, 13, 18-19, and 23-24 are patentably distinguished from Collins. Accordingly, for at least these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection.

It is believed that the foregoing remarks fully comply with the Office Action and place the application in condition for immediate allowance, which action is earnestly solicited.

Comments on Statement of Reasons for Allowance

Claims 25-31 stand allowed. Under 37 C.F.R. §1.104(e), reasons for allowance are intended only as a supplement to the "record as a whole" when that record is not clear and shall not be treated as a substitute for the record or in a manner inconsistent with the record. Therefore, Applicants accept the Examiner's reasons only to the extent that they are consistent with the record as a whole and do not accept any claim interpretation that is broader or narrower than that afforded by the record as a whole prior to the Examiner's statement of reasons for allowance. As to all claims for which the basis for allowance is

01-SM5-423
(ATI-0008-P)

otherwise clear from the record, no further limitation can be inferred from the examiner's statement under rule 104(e).

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' Attorneys.

Respectfully submitted,

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Date: January 29, 2003

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